United States Department of Agriculture | Forest Service | Arizona Zone Entomology & Pathology | 2500 S. Pineknoll Dr. Flagstaff, AZ 86001

File Code: 3400 **Date:** June 16, 1997
Route To: *

Subject: Functional Assistance on Insects and Diseases in the East Rim Overlook Assessment Area (AA).

To: Sue Spear and Brian Avery

As per your request from my field visit on May 21st, 1997, here is my specialist report on insect and disease conditions in the East Rim Overlook AA (East Rim).

Existing Condition

My evaluation of insect and disease conditions in East Rim Overlook area (EROA) is based on observations during my field visit, since little survey information exists on the analysis area. The major groups of insects and diseases present in the EROA are: bark beetles in ponderosa pine; root diseases in Douglas-fir, spruce and white fir; stem decays in white fir, Douglas-fir and aspen; stem cankers in aspen; dwarf mistletoe in Douglas-fir and ponderosa pine; and wood borers in aspen. Although some of these organisms occur at high frequencies in certain areas, there is no major outbreak of any insect or disease causing pathogen in the analysis area.

In the immediate overlook area, mortality and dieback due to soil compaction and bark beetles (especially in the mature pondersoa pine) is high. Also, the presence of root disease and stem decay of various mixed conifer species in dispersed camping areas near the rim is of concern for visitor safety.

In the proposed dispersed camping areas off of road FR 611, the most frequently observed organisms were poplar borers in young aspen trees, dwarf mistletoe of ponderosa pine, and bark beetles are killing the mature ponderosa pine.

Desired Condition

Lots of big trees, with a healthy understory. Insect and disease organisms are present, but not severely impacting vegetation objectives. Root disease and stem decay infected trees are not threatening public safety.

Developed sites have been designed in such a way as to minimize soil compaction and stress on residual vegetation.

Density of trees is such that attack of ponderosa pine by various species of bark beetles is minimal.

Environmental Consequences of Alternatives

Alternative #1: No Action.

Continued decline of trees in the immediate overlook area from soil compaction and secondary organisms. High potential for hazard tree problems.

Suggest hazard tree identification and mitigation be implemented in developed and known dispersed areas.

Alternative #2: Resource Protection.

Reduction in number of hazard trees in the immediate rim area since: (1) targets (dispersed campers) have been removed; and (2) high hazard trees are removed during construction of new trailhead and parking area. Also, site development should be designed to avoid creation of new hazard trees.

Vegetation treatments, such as thinning from below, will improve growth of residual trees, as well as their resilience to insects and disease causing pathogens.

Alternative #3: User Convenience.

Since there will be continued stress on trees in heavily used areas, the proposed campsite areas should be scrutinized closely for hazard trees.

Alternative #4: Managed Resources.

Reduction in number of hazard trees in the immediate rim area since targets (dispersed campers) have been removed. Also, new site development in the proposed parking area, trailhead, and campsites along FR 611 should be designed to avoid creation of new hazard trees.

Locating developed sites in aspen stands could become a hazard problem in 40 years or so.

It would be beneficial to include the vegetation treatments of Alternative #2 in Alternatives #3 and #4 in order to improve the growth of trees, and increase their resilience to insects and disease causing pathogens.

Thank you for letting me provide some input. If you have any questions you can contact me at (520)556-2075 or m.fairweather:S28L02a.

/s/Mary Lou Fairweather
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